ABSTRACT OF THE DISCLOSURE

A signal can be detected based on a level slice system and detection delay time can be reduced by setting the recording density of a header field in a linear direction lower (coarse) than that of a user data recording field. Further, a signal can be detected based on the level slice system and detection delay time can be reduced by using a mark position form having a large detection margin as an information recording system of the header field. A readout error of a sector number due to a detection error is compensated for by recording address marks AM for attaining byte synchronization of the header field in both of a head portion and tail portion of information recorded in the header field.